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FCC ADVISORY COMMITTEE ON ADVANCED TELEVISION SERVICE

SYSTEMS SUBCOMMITTEE

WORKING PARTY ON SYSTEM STANDARDS (SS/WP4)

PROGRESS REPORT

(SUBMISSION FOR THE THIRD INTERIM REPORT)

January 15, 1990

FCC ADVISORY COMMITTEE ON ADVANCED TELEVISION SERVICE
SYSTEMS SUBCOMMITTEE
WORKING PARTY ON SYSTEM STANDARDS (SS/WP4)

PROGRESS REPORT
(SUBMISSION FOR THE THIRD INTERIM REPORT)

Executive Summary

Systems Subcommittee Working Party 4 (SS/WP4) has the responsibility to examine all the available data gathered or developed by other working parties in the Advisory Committee and, based upon that information, recommend standards for the transmission of advanced television service.

Four meetings of the membership have been held. While consensus has not been reached on a procedure for reaching agreement on a standard should more than one choice be proposed, the Working Party has agreed that its primary intention is to recommend a single standard for the terrestrial transmission of ATV and that a recommended system must be capable of being carried by cable systems. Working Party 4 continues to project that its final report will be completed by late 1991 or early 1992.

I. Organization of the Working Party

The Chair of SS/WP4 is Dr. Robert Hopkins, Executive Director of the Advanced Television Systems Committee. He is assisted by three Vice-Chairs: Mr. Hugo Gaggioni of Sony Advanced Systems, Mr. Bruce Sidran of Bell Communications Research, and Mr. Louis Williamson of American Television and Communications. Mr. Sidran serves as the Secretary for the group. The Chair and the three Vice-Chairs are collectively referred to as the officers.

Approximately 60 individuals and organizations have indicated their interest in the work of SS/WP4 by becoming members. Membership is open to all interested entities. Document SS/WP4-0002 is the current roster. About 25 persons attend each meeting.

At the first meeting of SS/WP4, the members discussed the responsibility of the Working Party and agreed upon the following Charter:

> The Working Party on System Standards shall recommend standards for the transmission of ATV based on information supplied by any and all other working parties in the Advisory Committee.

The Working Party operates by consensus. At the second meeting of SS/WP4 it was agreed that:

The primary intention of SS/WP4 is to recommend a single standard for the terrestrial transmission of ATV.

Whatever system is recommended for terrestrial broadcast must be capable of being carried by cable systems as well.

SS/WP4 recognizes the importance of inter-operability between alternative media and terrestrial broadcast standards, and the desirability for consumer ATV receivers to accommodate alternative media inputs. However, it does not anticipate making recommendations in these areas, but does anticipate other organizations doing so. SS/WP4 will consider inputs from other organizations in its deliberations.

SS/WP4 will not document a standard in the manner of SMPTE or EIA, rather its role is to recommend a standard documented by others.

The Working Party has also discussed ATV system models. The study was undertaken because the Working Party believes that it is important to have inter-operability between alternative media and terrestrial broadcast standards and that it is desirable for consumer ATV receivers to accommodate alternative media inputs. The Working Party determined that two private-sector organizations were already involved in this area, the Advanced Television Systems Committee (ATSC), and the Electronic Industries Association (EIA). The Working Party recommended that these organizations be encouraged to develop specifications for an appropriate interface that could lead to a voluntary industry standard. The Working Party also suggested that liaison be maintained among the three groups to ensure consistency and that copies of all the relevant documents submitted to the Working Party be forwarded to the ATSC and the EIA.

III. Schedule of Future Work

SS/WP4 will continue to discuss decision-making procedures. There is general agreement within the Working Party that a procedure would be helpful, perhaps mandatory, if a choice must be made between surviving proposals. The difficulty has been that no proposed methodology has gained wide support. A presentation will be made at the fifth meeting on "value engineering," a procedure that has been used with success to evaluate alternatives to obtain maximum benefit in engineering programs. Also, members have been asked to propose procedures.

The difficulty of making a choice would be eliminated if the number of proponent systems decreased to only one. The Working Party thus encourages the system proponents to find ways to combine their efforts to lead to one system which could be supported by the entire industry.

Working Party 4 does not wish to change the projected date for agreement on a recommended standard for terrestrial broadcasting given in its Progress Report for the Second Interim Report (Document SS/WP4-0008). In that progress report it was

ALL OTHER SS/WP4 DOCUMENTS FOLLOW IN REVERSE ORDER

January 15, 1990

FCC Advisory Committee on Advanced Television Service

Results of "Test Scheduling & Planning Meeting," September 28, 1989

SEQUENCE & *PRO FORMA* CALENDAR

For Laboratory Testing of Proposed ATV Transmission Systems
By the Advanced Television Test Center & Cable Television Laboratories

	MOVE-IN: 10 days		MOVE-OUT: 5 days	
"ATV SYSTEM ACCESS PERIOD" No.	BEGIN INTERFACE CHECK	BEGIN TESTING	COMPLETE TESTING	PROPONENT/ SYSTEM
1990				
1	Fri. May 25	Mon. June 4	Tue. July 16	(1) Faroudja
2	Wed. July 17	Tue. July 24	Tue. Sept 4	(2) PSI
3	Wed. Sept 5	Wed. Sept 12	Tue. Oct 23	(3) Samoff (ACTV-I)
4	Wed. Oct 24	Wed. Oct 31	Wed. Dec 12	(4) NHK (Narrow MUSE)
5	Thur. Dec 13	Thur. Dec 20	Fri. Feb 8, '91	(5) NHK (MUSE 6)
1991				
6	Mon. Feb 11	Tue. Feb 19	Mon. Apr 1	(6) Zenith
7	Tue. Apr 2	Tue. Apr 9	Mon. May 20	(7) Samoff (ACTV-II)
8	Tue. May 21	Wed. May 29	Thur. July 11	(8) Philips
9	Fri. July 12	Fri. July 19	Tue. Sept 3	(9) MIT

MOVE-IN: Proponent allowed to begin moving equipment into ATTC and setting up 10 days prior to INTERFACE CHECK; AC power and air conditioning systems will be in operation.

INTERFACE CHECK: Beginning on this date, ATTC prepared to supply video, audio, and data signals as previously agreed; each system allowed five days prior to testing for proponent and ATTC/CableLabs staff to verify interface parameters.

TEST PERIOD: Up to 30 working days allowed for conducting objective tests and creating the video tape record of the system's tests.

MOVE-OUT: Proponent allowed up to five working days to remove all of its equipment from ATTC.

– See "ATTC TEST ADMINISTRATION PLAN & OPERATIONS MANUAL" for Full Definitions, Terms, and Conditions. –

This sequence and *pro forma* calendar is based on the following planning assumptions and related contingencies:

1 Dates are tentative; there may be slippage in the schedule. Proponents also may be advanced, upon reasonable notice, by one or more slots.

2 ATTC requires a testing schedule that promises reasonably continuous use of its facilities and avoids significant downtime between systems.

3 Proponents must confirm their test slots by remitting to ATTC a reservation fee of $25,000 per test slot by November 17, 1989. Remittance of testing fee balances will be due March 1, 1990. Applications for waiver or reduction of fees are due November 17, 1989.

4 Each system must operate with the source signal format previously committed to by its proponent to ATTC.

5 Full system descriptions must be submitted to the Advisory Committee by December 31, 1989 and changes to those descriptions must be submitted no later than 90 days before arrival of the system at ATTC.

6 All systems must be certified for testing by a procedure to be established by the Advisory Committee.

7 The schedule reflects a currently estimated six weeks for ATTC and Cable Labs to conduct the laboratory tests for broadcast and cable. It does not reflect: a) subjective assessment tests (video and audio); b) field tests in the actual transmission environment; or c) retesting. (Subjective testing is expected to be conducted off-line and in part at other facilities; it will start after a video tape record of a particular ATV system's test has been completed at ATTC.)

8 The schedule is dependent on: a) timely completion of appropriate "Test Procedure Plans;" b) confirmation of testing methods; c) delivery of test equipment (e.g., digital video tape recording technology), and d) validation of the laboratories and equipment (e.g., by a test of NTSC).

9 Test material for all systems must be produced, approved, and delivered to ATTC sufficiently in advance of testing.

10 In the event of a major change, the Advisory Committee, ATTC, and CableLabs should be notified immediately; a full system description must be submitted to the Advisory Committee, ATTC, and CableLabs within 30 days of the change; and the system must be recertified. Paragraph 4 applies to any major change. A major change may cause loss or delay of test slot.